

State of California
AIR RESOURCES BOARD

Summary of Board Meeting
January 31, 2003

California Air Resources Board
Central Valley Auditorium
1001 I Street
Sacramento, California

MEMBERS PRESENT: Hons. Alan C. Lloyd, Ph.D., Chairman
 Joseph C. Calhoun, P.E.
 Doreen D'Adamo
 Mark DeSaulnier
 C. Hugh Friedman
 William F. Friedman, M.D.
 Matthew R. McKinnon
 Barbara Patrick
 Barbara Riordan
 Ron Roberts

AGENDA ITEM #

03-1-1 Public Meeting to Consider a Health Update

SUMMARY OF AGENDA ITEM:

Staff updated the Board on recent information related to ultrafine particulate matter (PM < 0.1 µm diameter) and associated public health considerations and research activities. Information presented to the Board included the following: 1) a description of ultrafine PM and comparison to PM10 and PM2.5 particles from a physical viewpoint; 2) a summary indicating combustion processes as the major sources of ultrafine PM; 3) a summary of exposure and monitoring information, including a description of ARB's 12-station ultrafine PM monitoring network; 4) a summary of recent health-related findings from epidemiology, toxicology, and clinical human studies literature; and 5) ongoing research activities at ARB designed to address gaps in our understanding of health effects and exposure to ultrafine PM.

The presentation was well received by the Board, and the importance of studying airborne ultrafine PM was emphasized.

ORAL TESTIMONY: Kurt Rasmussen, Yah-Whoo Technologies

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: RD

STAFF REPORT: None

03-1-2 Public Meeting to Consider Research Proposals

SUMMARY OF AGENDA ITEM:

Staff recommended approval of two contracts:

Proposal No. 2524-227, entitled "Global Radiative Effect of Particulate Black Carbon," submitted by the California Institute of Technology for a total amount not to exceed \$164,592.

Proposal No. 2525-227, entitled "Source Apportionment of Fine and Ultrafine Particles in California: Tailpipe and Roadside Measurement of Ultrafine Particles," submitted by the University of California, Davis, for a total amount not to exceed \$114,907.

ORAL TESTIMONY: None

FORMAL BOARD ACTIONS: The Board approved resolutions 03-1 and 03-2 by a unanimous vote.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None

03-1-3 Public Meeting to Consider a Summary of the 1998 Regulatory Rulemaking Calendar

SUMMARY OF AGENDA ITEM:

A summary of each of the items listed on the 2003 Air Resources Board Rulemaking Calendar was presented to the Board and the public. The rulemaking calendar sets forth the Board's regulatory agenda for 2003.

A brief summary was also given regarding the rulemaking procedures and legal requirements according to the state Administrative Procedure Act (APA).

ORAL TESTIMONY: None

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Executive Office & Office of Legal Affairs

STAFF REPORT: None

03-1-4

**PUBLIC MEETING TO CONSIDER POLICIES AND
ACTIONS FOR ENVIRONMENTAL JUSTICE: JANUARY 2003**

SUMMARY OF AGENDA ITEM:

Staff of the Air Resources Board presented the Board with a status report on the implementation of the Environmental Justice Policies and Actions.

Since the last update to the Board in June 2002, the ARB staff has moved forward with the implementation of the Policies. Since that time, and in cooperation with the Environmental Justice Stakeholders Group, the staff has completed the Complaint Resolution Protocol and the Public Participation Guidebook. These items were specifically requested by community groups to promote the timely resolution of air pollution complaints and to aid community members in more fully participating in air pollution decision-making. The priority for this year is to start to address cumulative emissions, exposure and risk. This additional way of evaluating air pollution impacts considers cumulative emissions, exposures, and risk from all air pollution sources. Staff is taking two basic approaches to begin to address the issues of cumulative impacts: 1. a community level approach to answer basic questions; and 2. a site-specific approach to answer detailed technical questions. ARB staff is also participating in the Environmental Justice activities of the Cal/EPA, the South Coast Air Quality Management District, and the Governor's Office of Planning and Research.

ORAL TESTIMONY:

Mr. Tim Carmichael	Coalition for Clean Air
Ms. Jane Williams	California Communities Against Toxics
Mr. Carlos Porras	Communities for a Better Environment
Ms. Bonnie Holmes Gen	American Lung Association
Ms. Paula Forbis	Environmental Health Coalition

Ms. Diane Bailey	National Resources Defense Council
Mr. Joe Lyou	California League of Conservation Voters Education Fund / California Environmental Rights Alliance
Stewart Wilson	California Air Pollution Control Officers Association
Ms. Cindy Tuck	California Council for Environmental and Economic Balance

FORMAL BOARD ACTION: None

RESPONSIBLE DIVISION: Planning and Technical Support Division

STAFF REPORT: None

03-1-5

PUBLIC MEETING TO UPDATE THE BOARD ON THE STATUS OF EFFORTS TO REDUCE IN-USE NO_x EMISSIONS FROM ON-ROAD HEAVY-DUTY DIESEL VEHICLES (Element M17 of the California SIP)

SUMMARY OF AGENDA ITEM:

Staff presented to the Board a progress report on efforts to develop programs to reduce in-use NO_x emissions from on-road heavy-duty diesel vehicles.

The 1994 California State Implementation Plan (SIP) for ozone identified several approaches to reduce NO_x and other emissions from on-road heavy-duty diesel vehicles (HDDV). Since approval of the SIP, the Board has adopted significantly more stringent emission standards for new heavy-duty diesel engines (HDDE). However, in-use emissions from HDDVs continue to be a concern and ARB staff has been developing different programs to reduce in-use emissions. The following programs are strategies that ARB staff developed to address these concerns and presented to the Board:

- 1) a field NO_x screening program to identify on-road HDDVs with excessive NO_x emissions that would complement the current ARB program that only inspects for visible smoke emissions;
- 2) a HDDV in-use compliance program that tests specific HDDE models to determine if their emission control devices and systems have remained effective during the engine's useful life;
- 3) a heavy duty vehicle on-board diagnostic (OBD) program that provides a real time assessment of each emission control device or system and warns the operator when a defect or malfunction has occurred; and
- 4) a commitment to pursue financial incentives for advanced heavy-duty technologies capable of emissions below the required standards for new engines.

For more than a year, staff had been testing and repairing HDDVs in an effort to determine whether significant NOx reductions can be achieved by adding a field test for NOx to the current smoke inspection program. The testing and evaluation was designed to quantify the excess NOx emissions from the current in-use fleet of HDDVs, determine if a field screening test can accurately identify high emitters, and assess the effectiveness and cost of emission-reducing repairs. Staff presented the results of the study and discussed the feasibility of implementing such a program in the future.

In March of 2002, ARB staff began working with the U.S. Environmental Protection Agency (EPA), Engine Manufacturers Association (EMA), and diesel engine manufacturers to develop a manufacturer-run, in-use compliance program. In this program, the engine manufacturer would test engines of the same model to determine if they are in compliance with the emission standards that they were originally designed to meet. If high emissions and a defective design were identified, the manufacturer would recall all trucks using that engine, and modify them to comply with the emission standards. Critical to this program is the Not-to- Exceed (NTE) test procedure previously adopted by the Board, that allows for a simplified method of determining in-use compliance. The ARB and EPA staff, and EMA, are close to reaching consensus on how such a program would be implemented. Staff plans to bring a HDDE in-use compliance regulation to the Board for consideration later this year. This program would begin as a pilot program in California for the 2005 and 2006 model years, and would become a fully enforceable national program in the 2007 model year.

Staff is also developing a regulation that would require new heavy-duty vehicles to be equipped with an OBD system beginning with the 2007 model year. OBD systems are comprised mostly of software in the on-board computer that monitors virtually all emission-related components for malfunctions. When a malfunction occurs, the OBD system alerts the driver by illuminating a dashboard warning light, and stores diagnostic information that can be retrieved by repair technicians to identify the likely cause of the malfunction. The OBD system can be used during field inspections to screen out those vehicles in need of repair. It can also be used to identify engine models with high failure rates of emission control parts, resulting in compliance testing and a possible recall. OBD systems have been required on all gasoline and light and medium-duty diesel vehicles since the 1996 model year and have proved to be highly effective. Staff plans to bring a heavy-duty vehicle OBD regulation for Board consideration later this year.

ORAL TESTIMONY: None.

FORMAL BOARD ACTION: This item was solely for information and thus no Board action was necessary.

RESPONSIBLE DIVISION: Mobile Source Control Division

STAFF REPORT: None

03-1-6 Public Meeting to Consider Appointments to the Research Screening Committee

SUMMARY OF AGENDA ITEM:

The staff recommended appointments to the Board's Research Screening Committee. This Committee reviews and recommends air pollution research projects to the Board. The appointments will fill current vacancies on the Committee.

ORAL TESTIMONY: None

FORMAL BOARD ACTION:

Approved the staff recommendations for appointments to the Research Screening Committee by a unanimous vote.

RESPONSIBLE DIVISION: Research Division

STAFF REPORT: None